EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Thirty-eighth Meeting
Rome, 20-22 November 2002

PROJECT PROPOSAL: VENEZUELA

This document consists of the comments and recommendations of the Fund Secretariat on the following project proposal:

Foam:

- Phasing out CFC-11 by conversion to HCFC-141b as a blowing agent in the manufacture of rigid P.U. foams: Umbrella No. 2 project.
## PROJECT EVALUATION SHEET
### VENEZUELA

**SECTOR:** Foam  
**ODS use in sector (2001):** 540.6 ODP tonnes

**Sub-sector cost-effectiveness thresholds:**  
Rigid  
**US $7.83/kg**

### Project Titles:
(a) Phasing out CFC-11 by conversion to HCFC-141b as a blowing agent in the manufacture of rigid p.u. foams: Umbrella No. 2 project.

<table>
<thead>
<tr>
<th>Project Data</th>
<th>Rigid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise consumption (ODP tonnes)</td>
<td>149.01</td>
</tr>
<tr>
<td>Project impact (ODP tonnes)</td>
<td>135.46</td>
</tr>
<tr>
<td>Project duration (months)</td>
<td>24</td>
</tr>
<tr>
<td>Initial amount requested (US $)</td>
<td>1,026,072</td>
</tr>
<tr>
<td>Final project cost (US $):</td>
<td></td>
</tr>
<tr>
<td>Incremental capital cost (a)</td>
<td>613,000</td>
</tr>
<tr>
<td>Contingency cost (b)</td>
<td>21,300</td>
</tr>
<tr>
<td>Incremental operating cost (c)</td>
<td>407,632</td>
</tr>
<tr>
<td>Total project cost (a+b+c)</td>
<td>1,041,932</td>
</tr>
<tr>
<td>Local ownership (%)</td>
<td>100%</td>
</tr>
<tr>
<td>Export component (%)</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Amount requested (US $)** | 851,432

**Cost effectiveness (US $/kg.)** | 6.29

**Counterpart funding confirmed?**

**National coordinating agency** | FONDOIN

**Implementing agency** | UNIDO

### Secretariat's Recommendations

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Amount recommended (US $)</td>
<td>851,432</td>
</tr>
<tr>
<td>Project impact (ODP tonnes)</td>
<td>135.46</td>
</tr>
<tr>
<td>Cost effectiveness (US $/kg)</td>
<td>6.29</td>
</tr>
<tr>
<td>Implementing agency support cost (US $)</td>
<td>103,658</td>
</tr>
<tr>
<td>Total cost to Multilateral Fund (US $)</td>
<td>955,090</td>
</tr>
</tbody>
</table>
PROJECT DESCRIPTION

Sector background

CFC (Annex A Group I) Consumption and Phase-out Profile

According to Decision 35/57 Venezuela has selected Option 2 as starting point amounting to:

- Remaining consumption of CFCs eligible for funding as at 38th Meeting (per Decision 35/57, proviso B) 2,180.3 ODP tonnes
- Impact of ALL CFC projects submitted for funding at the 38th Meeting 135.46 ODP tonnes
- Maximum remaining consumption of CFCs eligible for funding following approval of projects submitted to 38th Meeting 2,044.84 ODP tonnes

Foam Sector Profile

- Consumption of CFCs in the foam sector in 2001* 540.6 ODP tonnes
- Amount of CFCs to be phased out in on-going foam projects 192.7 ODP tonnes
- Impact of foam projects submitted for funding at the 38th Meeting on remaining CFC consumption 135.46 ODP tonnes

* Based on data reported to the Fund Secretariat on 27 September 2002 by the Government of Venezuela.

Rigid polyurethane foam

Umbrella No. 2 project

1. The umbrella project is submitted in accordance with the foam sector strategy submitted by the Government of Venezuela to the 36th Meeting of the Executive Committee. However, instead of two umbrella projects and a terminal umbrella project foreseen in the strategy, the Government has decided to combine two umbrella projects and submit as one project to this meeting. The remaining companies in the sector will be included in a national phase-out plan which is planned to be submitted in the future.

2. UNIDO has indicated that the project when approved will be completed in two years, namely end of 2004.

3. The project covers 21 rigid foam producing companies consuming a total of 149 ODP tonnes of CFC-11. The consumption per enterprise ranges from about 4 to 20 tonnes per year. They produce polyurethane rigid foam for a variety of applications. Six of the enterprises mix the foam and pour by hand while the rest use a variety of old and relatively new foaming equipment. The profile of the 21 enterprises is shown in Table 1 below.
4. All the enterprises will convert their production to HCFC-141b technology through the use of low pressure machines and high pressure sprayfoam machines. The total incremental capital cost of the project (including contingency) is US $634,300 while the total incremental operating cost amounts to US $407,632 for a total project cost of US $1,041,932.
Justification for the use of HCFC-141b

5. Justification for the use of HCFC-141b based on technological and economic analysis of the operations of the enterprises is provided in the project document. UNIDO indicated that the choice of HCFC-141b as interim technology was made by the enterprises following discussions with them on available alternatives and relevant decisions of the Executive Committee regarding the use of HCFC-141b as interim substitute foam blowing agent. Consistent with Decision 36/56 (c) commitment letters from all 21 enterprises attesting to the information received from UNIDO have been attached to the project document.

6. A letter of transmittal from the Government of Venezuela endorsing the use of HCFC-141b by the companies is also attached to the project document. The Government further provided assurances that the transition period selected (30 years) notwithstanding, the enterprises will subsequently phase-out HCFC-141b to non-ODS substances when economically feasible alternatives become available in the country and consistent with the rules of the Montreal Protocol or the Multilateral Fund. UNIDO also indicated that the issue will be further addressed during the projects’ implementation.

SECRETARIAT’S COMMENTS AND RECOMMENDATIONS

COMMENTS

7. The project was not included in UNIDO’s 2002 business plan. However, UNIDO informed the Secretariat that it was submitted to replace two projects of the same value planned for Argentina which the Government of Argentina by a letter dated 11 September 2002 requested UNIDO to defer to its 2003 business plan.

8. The Fund Secretariat and UNIDO discussed the umbrella project against the background of the scale of the enterprises’ foam production, foam application, baseline processes and their conversion to HCFC-141b and agreed to calculate the incremental costs of conversion machines as follows.

Where an enterprise:

(a) is currently using low pressure machine which is not older than 10 years it will continue to use such machine after conversion with retrofit cost of US $7,500;

(b) is using a low pressure machine older than 10 years it will be replaced with new low pressure machine. The eligible cost of such machine will be calculated on the basis of a 5% deduction from the cost of the machine per year for each year exceeding 10 years;

(c) does not have any machine in the baseline it will be provided with a low pressure machine with 25% deduction from the cost of the machine for technology upgrade;
(d) currently uses high pressure machine the conversion will be based on retrofit cost of the baseline machine.

9. The summary of the project costs is as follows:

Total project cost: US $1,041,932
Eligible grant: US $ 851,432
Project impact: 135.46 ODP tonnes
Cost-effectiveness: US $6.29/kg

RECOMMENDATIONS

10. The Fund Secretariat recommends blanket approval of the Venezuela foam sector Umbrella No. 2 project with the funding level and associated support cost as indicated below.

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Project Funding (US$)</th>
<th>Support Cost (US$)</th>
<th>Implementing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Phasing out CFC-11 by conversion to HCFC-141b as a blowing agent in the manufacture of rigid p.u. foams: Umbrella No. 2 project.</td>
<td>851,432</td>
<td>103,658</td>
<td>UNIDO</td>
</tr>
</tbody>
</table>
GOVERNMENT NOTE OF TRANSMITTAL OF INVESTMENT PROJECTS TO THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

PROJECT(S) OF THE GOVERNMENT OF REPUBLICA BOLIVARIANA DE VENEZUELA

The Government of República Bolivariana de Venezuela requests the United Nations Industrial Development Organization (UNIDO) to submit the project(s) listed in Table 1 below/attached Table 1 to the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol for consideration at its 38th Meeting.

Section I: ODS Consumption Data

1. The ODS consumption figure(s) of the project(s) has/have been validated by the National Ozone Unit (NOU).

2. The consumption data have been retained in the records of the NOU for reference and/or future verification.

3. The Government has been advised by the NOU that the agreement to the project(s) indicates a commitment to ensure that the validated phase-out figure(s) was/were realized and yielded a sustained reduction from the 2000 consumption of 269,30 ODP tonnes for the (foam) sector.

Table 1: Projects Submitted to the 38th Meeting of the Executive Committee

<table>
<thead>
<tr>
<th>Project Title/Sector</th>
<th>Type of ODS</th>
<th>Consumption (ODP Tonnes), (Year)</th>
<th>Amount to be Phased Out (ODP Tonnes), (Year)</th>
<th>Implementing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foam Sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phasing out CFC-11 by conversion to HCFC-141b as a blowing agent in the manufacture of Rigid P.U. foams: UMBRELLA N° 2 PROJECT.</td>
<td>CFC-11</td>
<td>149,03</td>
<td>135,46</td>
<td>UNIDO</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>149,03</strong></td>
<td><strong>135,46</strong></td>
<td><strong>UNIDO</strong></td>
</tr>
</tbody>
</table>

Section II: Other Relevant Actions Arising from Decision 33/2

4. It is understood that, in accordance with the relevant guidelines, the funding received for a project would be partly or fully returned to the Multilateral Fund in cases where technology was changed during implementation of the project without informing the Fund Secretariat and without approval by the Executive Committee;
5. The National Ozone Unit undertakes to monitor closely, in cooperation with customs authorities and the environmental protection authorities, the importation and use of CFCs and to combine this monitoring with occasional unscheduled visits to importers and recipient manufacturing companies to check invoices and storage areas for unauthorized use of CFCs.

6. The National Ozone Unit will cooperate with the relevant implementing agencies to conduct safety inspections where applicable and keep reports on incidences of fires resulting from conversion projects.

Section III: Projects Requiring the Use of HCFCs for Conversion

7. In line with Decision 27/13 of the Executive Committee and in recognition of Article 2F of the Montreal Protocol, the Government


(b) has nonetheless determined that, at the present time, the projects needed to use HCFCs for an interim period with the understanding that no funding would be available for the future conversion from HCFCs for the company/companies involved.

Name and signature of responsible Officer:

Econ. Victor Alvarez

Designation: President (E) of FONDOIN

Fondo Venezolano de Reconversion Industrial y Tecnológica (FONDOIN)

Telephone: (58-212) 731-29-92 / 731-39-32

Fax: (58-212) 731-00-15

E-mail: fondoin@cantv.net

Projects of the Government of República Bolivariana de Venezuela Date: August 30, 2002

Av. Libertador, Centro Comercial Los Cedros, piso 5, La Florida Sur, 1050, Caracas – Venezuela

Tel: (58-212) 7313932 / 7312992 Fax (58-212) 7310015 E-mail: fondoin@cantv.net
FONDOIN
FONDO VENEZOLANO DE RECONVERSION INDUSTRIAL Y TECNOLÓGICA

Caracas, October 21, 2002

M.I.F.S.
Montreal.

Att.: Mr. Richard Abrowka-Ampadu.

Subject: Use of HCFC as transitional substance.

In line with the decision 27/13 of the Executive Committee and in recognition of Article 2F of the Montreal Protocol, the Government of Venezuela


c) Notwithstanding the transitional period stated by the companies in their commitment letters (interim period of 30 years) mentioned in paragraph (b).

d) The Government of the Republica Bolivariana de Venezuela will ensure that the companies abide by any limitation imposed by decisions of the parties to the Multilateral Fund of the Montreal Protocol or by the rules of the M.I.F.S. regarding the use of HCFC as transitional substance.

e) The companies will convert to non-ODS substances when the use of these substances becomes economically feasible in the country.

OSMER CASTILLO
President of FONDOIN

C.C. Tamas Grof and Enrique Puerto-Ferre. (UNIDO)